Claims

1. A method for facilitating network communications from one or more independent execution threads by a dedicated worker thread, comprising the steps of:
storing a request object by an execution thread in a data structure, the request object describing a request for a network operation and having state information;
retrieving the request object from the data structure by the worker thread;
modifying the request object to indicate a change of state;
sending a non-blocking function call to a networking module;
sending the request object to the networking module; and
executing the non-blocking function call.

2. The method of claim 1 further comprising the step of storing a notification of completion in the data structure by the networking module, wherein the notification of completion corresponds to the request object.

3. The method of claim 2 further including the step of retrieving a notification of completion by the worker thread from the data structure.

4. The method of claim 3 further comprising the steps of:
retrieving the request object corresponding to the notification of completion by the worker thread;
determining whether the request described in the request object is complete; and
upon determination that the request is complete, sending a message to an execution thread indicating that the request is complete.

5. The method of claim 3 further comprising the steps of:
retrieving the request object corresponding to the notification of completion by the worker thread;
determining whether the request described in the request object is complete; and

upon determination that the request is not complete sending a second non-blocking function call to the networking module.

6. The method of claim 1 wherein the request object further includes information identifying the execution thread.

7. The method of claim 1 wherein the data structure is a queue.

8. A system for facilitating network communications from one or more independent execution threads using a networking module able to execute non-blocking networking function calls, comprising:
a data structure;
one or more request objects stored in the data structure, the request objects comprising:
information describing a request for a network operation; and
state information;
a worker thread connected to the data structure and to the networking module and configured to retrieve a request object from the data structure, modify the state of the request object and send a non-blocking function call to the networking module.

9. The system of claim 8, wherein the data structure is a queue.

10. The system of claim 8, wherein the worker thread is further configured to send the request object to the networking module.

11. The system of claim 8, wherein the data structure is further configured to receive a notification of completion from the networking module and store the notification of completion.

12. A system for testing a server comprising:

one or more virtual user threads, each virtual user thread being configured to simulate a computer that is using the server;

a networking module connected to the server over a computer network;

one or more request objects, the request objects comprising:

information describing a request for a network operation; and

state information;

a data structure connected to the virtual user threads and configured to enable the virtual user threads to store request objects therein;

a worker thread connected to the data structure and to the networking module and configured to retrieve a request object from the data structure, modify the state of the request object and send a non-blocking function call to the networking module.

13. The system of claim 12, wherein the data structure is a queue.

14. The system of claim 12, wherein the networking module is configured to store a notification of completion in the data structure, the notification of completion being associated with the request object.

15. The system of claim 14, wherein the worker thread is further configured to retrieve the notification of completion and to retrieve the request object from the notification of completion.

16. The system of claim 15, wherein the worker thread is further configured to determine whether the request for a network operation is completed, based on the request object and the notification of completion.